# Overview of the JPDO Environment Integrated Product Team (EIPT)

**22<sup>nd</sup> Annual UC Symposium on Aviation Noise and Air Quality** 

**Gregg G. Fleming U.S. DOT/Volpe Center** 



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# The Next Generation Air Transportation System

- The Next Generation Air Transportation System (NGATS or NextGen) refers to an initiative <u>started in 2003</u> to transform the U.S. air transportation system <u>by 2025</u>.
- In contrast to today's system, the Next Generation Air Transportation System will be more flexible, resilient, scalable, adaptive, and highly automated – meeting up to two to three times current demand.

Former Secretary of Transportation Norman Y Mineta said in 2004,

"The changes that are coming are too big, too fundamental for incremental adaptations of the infrastructure we need to modernize and transform our air transportation system – starting right now."

Vext Generation Air Transportation System

## The NGATS Integrated Plan

The NGATS <u>Integrated Plan</u> is a plan to ensure that the NGATS meets air transportation safety, security, mobility, efficiency, and capacity <u>needs beyond</u> those currently included in the FAA's "<u>Operational Evolution Plan</u>," and was delivered to Congress in December, 2004



#### **NGATS Vision/Goals:**

A transformed air transportation system that provides services tailored to individual customer needs, allows all communities to participate in the global economy, and seamlessly integrates civil and military operations

**Expand Capacity** 

**Ensure Safety** 

Ensure our National Defense

Retain U.S. Leadership in Global Aviation

Protect the Environment

**Secure the Nation** 

Download .pdf version of the plan at www.jpdo.aero

### The JPDO and Environment IPT

- The Joint Planning and Development Office: In 2003, President Bush and Congress took the first decisive steps with the enactment of VISION 100 Century of Aviation Reauthorization Act (P.L. 108-176). It laid out the mandate for NGATS initiative and proposed a unique public/private partnership managed by the JPDO to carry it out.
  - ➤ It includes the Departments of <u>Transportation</u>, <u>Defense</u>, <u>Homeland Security</u> and <u>Commerce</u> and the <u>FAA</u>, <u>NASA</u> and <u>White</u> <u>House</u> Office of Science and Technology Policy.
- The <u>Environment IPT</u>: One of eight IPT's that have been established within the JPDO to execute the <u>NGATS Integrated Plan</u>, charged with achieving the <u>NGATS Integrated Plan</u> strategy to:
  - > <u>Develop Environmental Protection that Allows Sustained Aviation</u> <u>Growth</u>

### **How is the JPDO Managed?**

All facets of the NGATS Plan are managed by an Inter-Agency Governance Model under the auspices of the JPDO

#### **Senior Interagency Policy Committee**

Guides and approves the National Integrated Plan



#### **Joint Planning and Development Office (JPDO)**

• <u>Develops and oversees</u> implementation of the National Integrated Plan









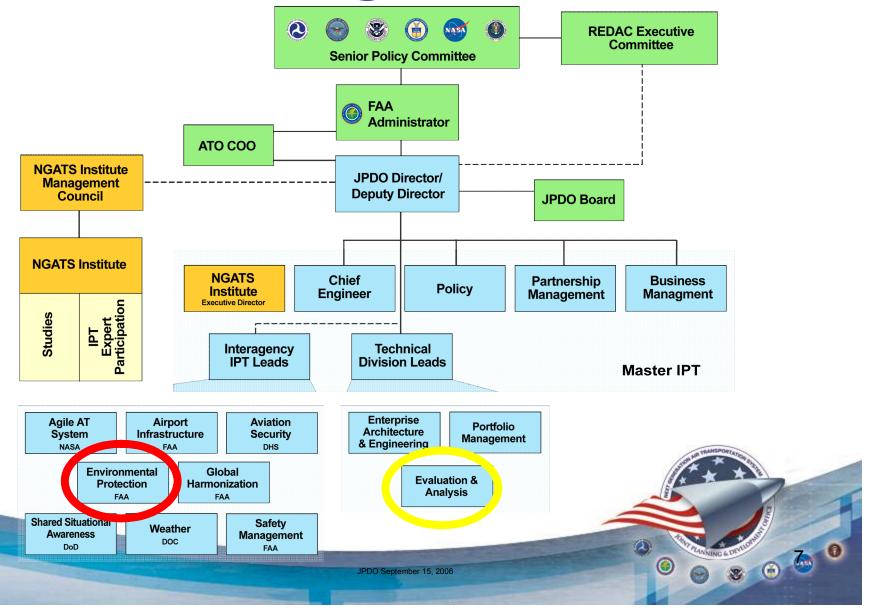




#### **Inter-Agency Integrated Product Teams**

**Develops and oversees implementation of Action Plans** 

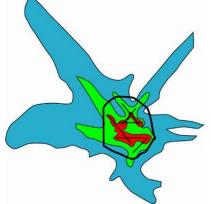
## JPDO Organization



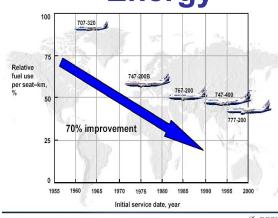
## **EIPT Challenges**

## Community Noise Impacts Reducing and mitigating

significant noise around airports



Energy



Progress in fuel fuels

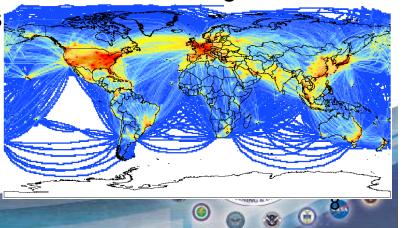
**Air Quality** 

Limiting or reducing significant impact on local air quality



#### **Global Climate**

Addressing aviation's effect on global climate



## Water Quality Reducing significant

water quality impacts

## EIPT 2025 Vision: To Provide Environmental Protection that Allows Sustained Aviation Growth

- By <u>2025</u>, the <u>significant impact</u> of aviation on community noise, local air quality and water runoff will be <u>reduced in absolute terms</u>, even with the anticipated <u>growth in aviation</u>.
- <u>Uncertainties</u> regarding the contribution of aviation to climate change and the <u>health effects</u> of emissions will be <u>reduced</u> to a level that <u>enables appropriate actions</u> to address these effects. Communities will value airports as gateways to the national and international transportation network.
- Through broad and sustained commitment among all stakeholders, <u>U.S.</u> aerospace will be the <u>global leader</u> in researching, developing, and implementing technological, operational and policy initiatives that address mobility and <u>environmental needs</u>.

## **EIPT Organization**

#### **EIPT Steering Group**

**Director:** Carl Burleson, FAA **Deputy Director:** Julie Draper, FAA

NASA Chief Scientific and Technical Advisor: Anita Liang, NASA FAA Chief Scientific and Technical Advisor: Lourdes Maurice, FAA

DOT/FAA, NASA, NOAA, DOD, DOI, EPA, CEQ, Key Stakeholders

#### **Executive Secretariat**

Julie Draper, FAA, Chair Brenda Howard, FAA Michon Washington, FAA

#### JPDO Liaison Support

Olga Legoshina, Beacon Matt Metcalfe & Chris Osburn, BAH

## Science/Metrics Panel Jim Hileman, MIT Sandy Webb, ECG

Analytical Tools Panel
Gregg Fleming
Volpe

**Operations Panel** Everett Palmer, NASA

Joe Watt, Boeing

**Technology Panel**Greg Follen, NASA

Joe Posey, NASA

Policy Panel Lynne Pickard FAA

The EIPT is staffed with members from government, academia, industry, and others responsible for researching, developing, implementing, and maintaining environmental protection strategies.

#### **EIPT Panel Activities**

Science/Metrics
Panel

Develop new metrics, advancing science on health and welfare impacts, and advancing public education

Develop analytical tools for aviation noise and emissions impacts, and analysis of costs/benefits of mitigation techniques

Analytical Tools
Panel

**Operations Panel** 

- \* Near-term new operational procedures implementation and advanced procedures.
- \* Focus on: Low noise/emission approaches, and more efficient surface paths and minimizing surface delays

## EIPT Panel Activities (cont.)

- \* Formulate strategies for technology development (engine, airframe, fuel) to address noise/emission environmental issues.
- \* Provide drivers for investment in noise/emissions technology development efforts.

**Technology Panel** 

**Policy Panel** 

Propose policies to address the environmental impacts of aviation within a 20-year timeframe (2005-2025), as well as specific policy initiatives to mitigate impacts (e.g., land use, home insulation, market-based options).

>> For more information on Panel Activities, including FY06 accomplishments and FY07-08 activities, contact Michon Washington, EIPT Secretariat Support, at michon.washington@faa.gov for a copy of the EIPT FY07-08 Work Plan.



## **EIPT Internal Communication & Coordination**

- Face to Face Meetings:
  - The Steering Group meets twice a year with Panel Chairs; usually January and July
  - The Panel Chairs meet quarterly
  - Individual Panels meet on an as needed basis
- Monthly Teleconferences:
  - Steering Group with Panel Chairs
  - Secretariat with Panel Chairs
  - Individual Panels, dependent on schedule and needs
- Electronic Mail:
  - Important notices, meeting minutes, and action items are communicated via e-mail

### **Need Additional Information?**

#### JPDO

- http://www.jpdo.aero/index.html
- Background questions and answers:
   <a href="http://www.jpdo.aero/factsheet.html">http://www.jpdo.aero/factsheet.html</a>

#### EIPT

 Contact Michon Washington, EIPT Secretariat Support, at <u>michon.washington@faa.gov</u> for *EIPT* FY07-08 Work Plan

